

Election

In the Office Action, the Examiner restricted the application and required an election between Group I (claims 1-8, drawn to a method of making a semiconductor device) and Group II (claims 9-12, drawn to semiconductor device). Applicants elect, without traverse, to prosecute Group II, comprising claims 9-12. By a Preliminary Amendment included herewith, Applicants have added new claims 13 through 28, which are also directed to the same subject matter as the elected group.

Preliminary Amendment

In view of the above election, and prior to examination of the application, please amend the application as shown below.

In the Claims:

Please replace the existing versions of claims 9-12 with the amended claims below, and add new claims 13-28 as shown. Pursuant to 37 C.F.R. § 1.121(c), the amended claims shown below in clean form are shown in marked-up form in Appendix A attached hereto.

9. (Amended) A semiconductor package, comprising:

a leadframe having a die pad and bonding pads, wherein said die pad is designed to carry a die adhered thereon by adhesive material, wherein said die pad and bonding pads are separated;

a plurality of bonding wires connected between said bonding pads and said die for electrical communication; and

molding compound encompassing said die, said bonding wires and a first surface of said leadframe, leaving the terminal of said bonding pads and the lower surface of said die pad exposed out of said molding compound for providing excellent thermal dissipation from said package, wherein said exposed bonding pads is used for communication terminal for said package.

10. (Amended) The semiconductor package of claim 9, wherein said die is attached by adhesive material.

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Sub 1a 11. (Amended) The semiconductor package of claim 10, wherein said adhesive material includes epoxy.

B 12. (Amended) The semiconductor package of claim 9, wherein said bonding wires includes gold.

Sub 1a 13. (New) The semiconductor package of claim 11, wherein said adhesive material includes silver epoxy.

B 14. (New) The semiconductor package of claim 9, wherein said molding compound includes mold resin.

A2 15. (New) The semiconductor package of claim 9, further comprising a solder ball formed on said terminal of said bonding pad.

16. (New) The semiconductor package of claim 9, wherein said leadframe comprises two said bonding pads.

17. (New) The semiconductor package of claim 9, wherein said die pad and said bonding pad are formed of same conductive material.

18. (New) A semiconductor package, comprising:

a die;

a die pad for carrying said die attached thereon;

a plurality of bonding pads separated from said die pad;

a plurality of bonding wires connected between said bonding pads and said die for electrical communication; and

a molding compound encompassing said die, said bonding wires, a portion of each said bonding pad and a upper surface of said die pad, leaving the terminal of each said bonding pad and a lower surface of said die pad exposed out of said molding compound for providing excellent thermal dissipation from said HSQFN package.

19. (New) The semiconductor package of claim 18, wherein further comprising an adhesive material adhering said die and said die pad.

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20. (New) The semiconductor package of claim 19, wherein said adhesive material comprises epoxy.

21. (New) The semiconductor package of claim 20, wherein said adhesive material comprises silver epoxy.

22. (New) The semiconductor package of claim 18, wherein said die pad and said bonding pads are formed of same conductive material.

23. (New) The semiconductor package of claim 18, wherein said bonding wire comprises gold.

24. (New) The semiconductor package of claim 18, wherein said molding compound comprises mold resin.

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25. (New) The semiconductor package of claim 18, further comprising a solder ball formed on said terminal of said bonding pad.

26. (New) A semiconductor package, comprising:

- a die;
- a die pad for carrying said die adhered thereon by an adhesive material;
- two bonding pads separated from said die pad;
- two bonding wires each of which connected between one said bonding pad and said die for electrical communication; and
- a molding compound encompassed said die, said bonding wires, a portion of each said bonding pad and a upper surface of said die pad, leaving the terminal of each said bonding pad and a lower surface of said die pad exposed out of said molding compound for providing excellent thermal dissipation from said HSQFN package.

27. (New) The semiconductor package of claim 26, wherein said bonding wire comprises gold.

28. (New) The semiconductor package of claim 26, wherein further comprising a solder ball formed on said terminal of said bonding pad.